CHIGNIK MANAGEMENT AREA HERRING SAC ROE FISHERY MANAGEMENT PLAN, 1993

By

Alan Quimby and David Owen

Regional Information Report¹ No. 4K93-4

Alaska Department of Fish and Game Division of Commercial Fisheries 211 Mission Road Kodiak, AK 99615

March 1993

¹The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished division reports. These reports frequently serve diverse ad hoc informational purposes or archive basic uninterpreted data. To accommodate timely reporting of recently collected information, reports in this series undergo only limited internal review and may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Division of Commercial Fisheries.

ACKNOWLEDGEMENT

Critical review of this manuscript by Bob Murphy, Jim McCullough and Arnie Shaul is greatly appreciated. The authors wish to express their appreciation to Lucinda Neel for her direction and technical support.

TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES	i
LIST OF FIGURES	i
INTRODUCTION	1
Description of Area	1
History of the Herring Fishery	1
Management Strategy Sac Roe Fishery	1
CHIGNIK AREA HERRING MANAGEMENT PLAN	2
Registration Requirements	2
Tenders and Processors	
Regulations in Effect	2
Guideline Harvest Level	2
Fishing Season	3
Fishing Periods	3
Airplanes	3
Legal Herring Gear	3
Tender and Processors Reporting Requirements	3
1993 Management Strategy	4

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Guideline harvest levels for the Chignik Management Area, 1993	. 5
LIST OF FIGURES	
<u>Figure</u>	Page
1. Map of the Alaska Peninsula illustrating the relative location of the Chignik Management Area	. 6
2. Map of the Chignik Management Area with the statistical fishing districts and some prominent locations identified	. 7
3. Chignik Management Area herring harvests, 1980-1992	. 8

INTRODUCTION

Description of Area

The Chignik Management Area lies on the south side of the Alaska Peninsula between the Kodiak Management Area to the east and the Alaska Peninsula-Aleutian Islands Management Area to the west (Figure 1). Kilokak Rocks is the eastern boundary and Kupreanof Point is the western boundary. The area is subdivided into the Eastern, Central, Chignik Bay, Western and Perryville Districts (Figure 2).

History of the Herring Fishery

At the inception of the Alaska Peninsula herring fishery, Chignik area catches were grouped with catches from north and south peninsula areas and labeled as Southwestern Alaska catches. The earliest recorded commercial herring fishery occurred in 1906. Annual Southwestern Alaska herring catches for the early 1900s did not exceed 500 tons. A small herring saltery was operated at Lake Bay in the Chignik Bay District during the early 1930s. Herring were harvested with beach seines and salted for future resale. No further breakdown of catch by area is available. The herring fisheries ceased in the late 1930s and did not commence again until 1980, when the sac roe fishery was initiated.

The herring sac roe fishery in the Chignik Area began in 1980. Although the current sac roe fishery may not be fully developed, exploration and effort levels suggest that it will continue to be a relatively low participation and low yield fishery.

Management Strategy Sac Roe Fishery

Several geographic areas support the majority of Chignik's spawning biomass; and the herring in each of these areas are managed as discrete stocks.

The annual harvest for each identified stock is dependent upon previous year biomass estimates and an exploitation rate of 0-20% of the available spawning biomass. The annual level of exploitation is dependent on evaluation of individual stock status, recruitment, and age composition. By regulation, the herring sac roe season extends from 15 April through 30 June. Inseason management stipulates alternating 24 hour fishing periods, and 24 hour closures. Each fishing period will begin at 1200 hours (12:00 noon) on odd numbered days throughout the regulatory season and close at 1200 hours (12:00 noon) on even numbered days or when the harvest level for an individual stock is achieved. Preseason harvest projections may differ from actual harvest levels if inseason information suggests the spawning biomass of discrete stocks differ significantly from anticipated levels.

The fishery is monitored through contact with fishermen and aerial observations of the herring biomass, as well as daily contact with local processors.

An important element in the management of the Chignik herring fishery comes from information collected by fishermen and commercial spotters regarding biomass estimates, location of herring, spawning areas, etc.. This cooperation is definitely encouraged and all exchange of information will be confidential.

CHIGNIK AREA HERRING MANAGEMENT PLAN, 1993

Registration Requirements

Tenders and Processors

Each tender operator and buyer must register in person with the Alaska Department of Fish and Game (ADF&G) and obtain a registration packet containing statistical charts, etc. in Kodiak or Chignik prior to fishing (regulation 5 AAC 27.540).

Fishing Vessels

There is no area registration requirements for fishing vessels in 1993.

Regulations in Effect

Refer to the 1992 Commercial Herring Regulation Booklet.

5 AAC 27.590. BUYER AND TENDER REPORTING REQUIREMENTS. In addition to the requirements of 5 AAC 39.130 (f) each tender operator and each buyer or his agents shall report in person to and register with a local representative of ADF&G upon arrival in the statistical area before commencing operations and before changing location of the operation. Each buyer shall: (1) identify all vessels to be employed in transporting or processing herring and shall register such vessels with a local representative of ADF&G located in the statistical area before transporting or processing herring.

Guideline Harvest Level

The Statewide harvest policy of harvest on a 0-20% exploitation rate of the available spawning biomass will be followed.

Harvest levels will be determined inseason on a bay or stock basis. The commercial herring harvest from the Chignik Area has been declining since 1980 (Figure 3). The harvest range for the past thirteen seasons has been 0 to 694 tons with an average of 54 tons (Table 1). Based on past years interest and effort, the harvest in 1993 will be between 10 and 30 tons.

The actual 1993 harvest will depend upon the biological condition of the stock, the amount of effort actively exploring the area, and the availability of local processing. However, it is not expected that the 1993 harvest will reach the thirteen year average harvest of 54 tons.

Fishing Season

Herring may be taken from 15 April through 30 June.

Herring may be taken only during periods established by emergency order.

Fishing Periods

Initially, fishing periods will be 24 hours long beginning at 1200 hours (12:00 noon) on all odd numbered days and ending at 1200 hours (12:00 noon) on all even numbered days. The schedule will begin at 1200 hours (12:00 noon) 15 April. Any changes in this fishing schedule will be announced by emergency order.

Airplanes

There is no restriction on the use of airplanes in the sac roe herring fishery.

Legal Herring Gear

5 AAC 27.565. (a) Herring may be taken only by purse seines.

5 AAC 27.575. SEINE SPECIFICATIONS AND OPERATIONS. No purse seine may be more than 1,000 meshes in depth or more than 100 fathoms in length.

Tender and Processors Reporting Requirements

All processors and tender operators will be required to report daily catch information to ADF&G. This can be accomplished either by radio (SSB) or telephone.

The Chignik ADF&G office will stand by on 4125 SSB and VHF CH6 frequencies, between 0800 hours - 1000 hours (8:00 -10:00 A.M.) and 2000 hours to 2200 hours (8:00 P.M. - 10:00 P.M.). The call sign for Chignik is KGB 76 "Chignik Weir", telephone number 845-2243, FAX number 845-2235. If unable to contact ADF&G Chignik, your catch information should be given to ADF&G Kodiak or Cold Bay via telephone or 4125 SSB. The call signs for Kodiak and Cold Bay are WHM 29 and WHW 906, respectively. Failure to report is a violation of commercial fishing regulations (5 AAC 27.590 (2)); vigorous enforcement of this regulation should be expected as a result of past harvest reporting deficiencies.

Because of the relatively small guideline harvest levels for some bays and districts, the fishing season will be promptly closed by emergency order whenever it appears that accurate catch information cannot quickly be obtained from the processors and tenders by radio or telephone. Prompt reporting will increase the likelihood of reopening certain areas if the summarized catches indicate that the desired guideline harvest levels have not been reached in a certain bay or district and if there are sufficient numbers of herring present in the bay to warrant a reopening.

For Confidential Purposes:

<u>Individual code sheets will be given to each tender/processor for the purpose of</u> reporting catch (tons) and statistical area where herring were caught.

1993 Management Strategy

The 1993 Chignik herring management plan will incorporate some of the data collected during the 1980-1992 seasons. Harvest levels are established only in those bays where historical biomass estimates and fishing effort dictate.

The Big River Section has not received any appreciable recruitment of herring since 1980.

The trend in this stock's age composition has regressed from a healthy 1980 biomass dominated by 4 and 5 year old fish to a diminished biomass in 1986 dominated by 8 and 9 year old fish. No significant recruitment has occurred in recent years. Consequently the Big River Section (272-70 Amber Bay and 272-60 Aniakchak Bay) will remain closed in 1993.

Lake Bay (271-10) in the Chignik Bay District and Castle Bay (273-94) in the Castle Cape Section of the Western District will be very closely monitored in 1993.

Table 1. Guideline harvest levels for the Chignik Management Area, 1993^a.

Stat. Area	Guideline Management Unit	Harvest Levels	Required Spa	wning Biomass @10%
272-20	Amber Bay (Aniakchak Bay)	0 Tonsb	0 Tons	0 Tons
271-10	Anchorage Bay	100 Tons	500 Tons	1,000 Tons
273-94	Castle Bay	10 Tons	50 Tons	100 Tons
271-10	Chignik Lagoon	10 Tons	50 Tons	100 Tons
272-30	Hook Bay	10 Tons	50 Tons	100 Tons
275-50	Humpback Bay	20 Tons	100 Tons	200 Tons
275-40	Ivanof Bay	10 Tons	50 Tons	100 Tons
272-50	Kujulik Bay	10 Tons	50 Tons	100 Tons
271-10	Lake Bay	10 Tons	50 Tons	100 Tons
272-96	Port Wrangall (Agripina)	20 Tons	100 Tons	200 Tons
TOTAL		200 Tons	1,000 Tons	2,000 Tons

^a The specific statistical areas listed above are those areas having a historical sac-roe harvest. The remainder of the Chignik Management Area is open for exploration and will be regulated within the statewide herring harvest policy of 0% to 20% of the available biomass.

b The Big River Section (272-70 Amber Bay and 272-60 Aniakchak Bay) will remain closed in 1993.

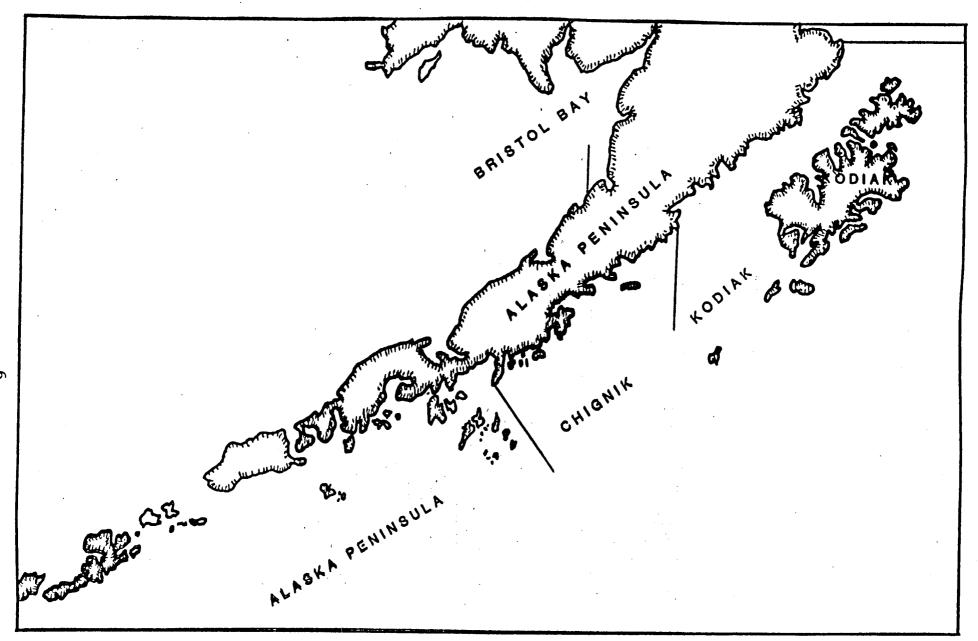


Figure 1. Map of the Alaska Peninsula illustrating the relative location of the Chignik Management Area.

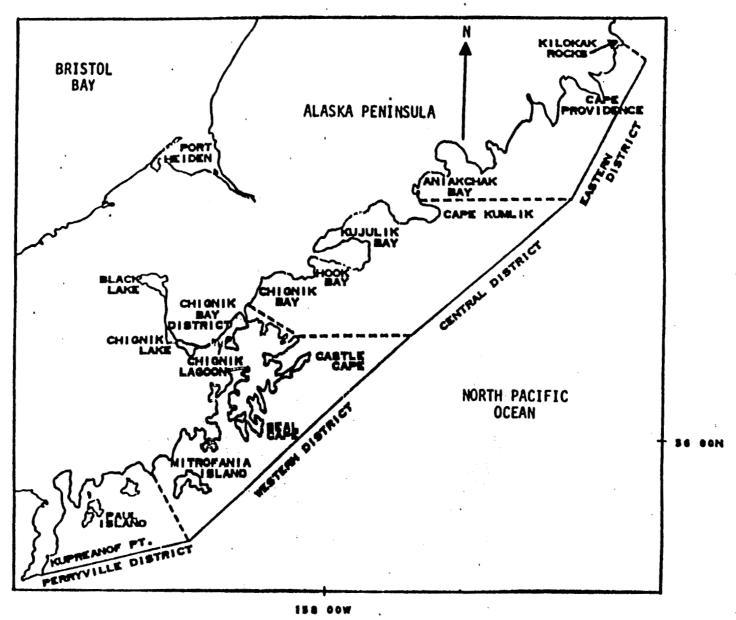


Figure 2. Map of the Chignik Management Area with the statistical fishing districts and some prominent locations identified.

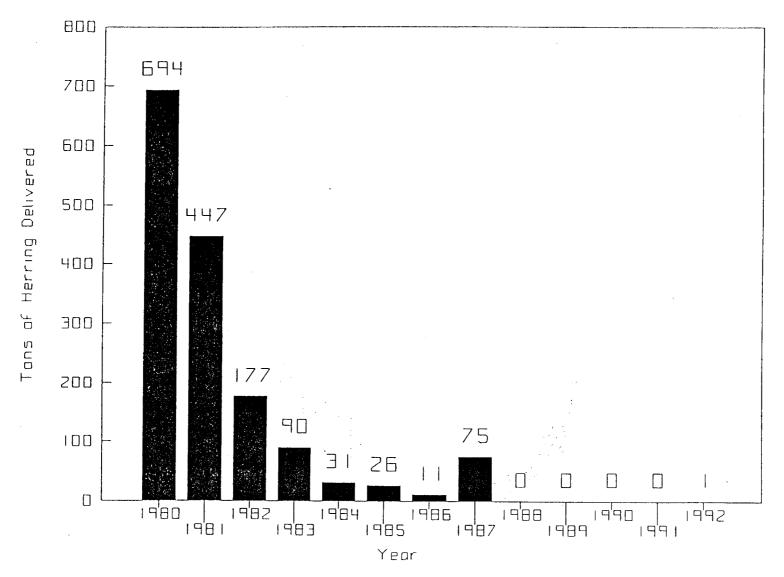


Figure 3. Chignik Management Area herring harvests, 1980 - 1992.

The Alaska Department of Fish and Game administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility, or if you desire further information please write to ADF&G, P.O. Box 25526, Juneau, AK 99802-5526; U.S. Fish and Wildlife Service, 4040 N. Fairfax Drive, Suite 300 Webb, Arlington, VA 22203 or O.E.O., U.S. Department of the Interior, Washington DC 20240.

For information on alternative formats for this and other department publications, please contact the department ADA Coordinator at (voice) 907-465-6077, (TDD) 907-465-3646, or (FAX) 907-465-6078.